

CDP



Research Update -- April 4, 2024

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<https://doi.org/10.1002/jts.23024>

BPD Compass: Using a dimensional model of psychopathology to treat co-occurring borderline personality disorder and posttraumatic stress symptoms.

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Journal of Traumatic Stress

First published: 19 March 2024

BPD Compass is a transdiagnostic psychotherapy that includes cognitive, behavioral, and mindfulness skills targeting the personality dimensions of negative affectivity, disinhibition, and antagonism. Given considerable symptom comorbidity and overlap in etiology between borderline personality disorder (BPD) and posttraumatic stress disorder (PTSD), this study investigated whether BPD Compass holds promise as an integrated approach to simultaneously treating co-occurring BPD features and PTSD symptoms. Participants included 84 trauma-exposed adults who participated in a two-phase clinical trial (Phase 1: randomized controlled trial of BPD Compass vs. waitlist [$n = 43$]; Phase 2: open trial of BPD Compass [$n = 41$]). Compared to waitlist, BPD Compass led to medium-to-large-sized, significant improvements in BPD features, β s = $-.57$ – $-.44$, and facets of neuroticism, β s < $-.55$ – $-.73$, as well as small, nonsignificant improvements in self-reported, $\beta = -.20$, and clinician-rated PTSD symptom severity, $\beta = -.19$. During treatment, within-person improvements in PTSD symptoms predicted subsequent improvements in BPD features, $\beta = .13$, but not vice versa, $\beta = .07$. Within-person PTSD symptom reduction also predicted subsequent improvement in all personality dimensions, whereas only within-person improvement in despondence, $\beta = .12$, affective dysregulation, $\beta = .11$, and dissociative tendencies, $\beta = .12$, predicted PTSD symptom reductions. Findings offer preliminary support for the potential of BPD Compass to target BPD features and aspects of neuroticism and agreeableness among trauma-exposed adults. Moreover, PTSD symptom change predicting subsequent improvement in BPD features runs counter to current stage-based treatment models that emphasize BPD feature stabilization before engaging in trauma-focused therapy.

<https://doi.org/10.1001/jamapsychiatry.2024.0189>

Validation of a Multivariable Model to Predict Suicide Attempt in a Mental Health Intake Sample.

Papini, S., Hsin, H., Kipnis, P., Liu, V. X., Lu, Y., Girard, K., Sterling, S. A., & Iturralde, E. M.

JAMA Psychiatry

Published online March 27, 2024

Key Points

Question

Can a model predicting suicide attempts accurately stratify suicide risk among individuals scheduled for an intake visit to outpatient mental health care?

Findings

In this prognostic study testing a previously validated model of suicide attempts using a sample of 1 623 232 mental health intake appointments scheduled during the past decade, the model showed good overall classification performance. The 10% of appointments at the highest risk level accounted for 48.8% of the appointments followed by a suicide attempt within 90 days.

Meaning

These findings suggest that risk for suicidal behavior may be accurately stratified for mental health care intake appointments to facilitate targeted preventive interventions for individuals who are seeking to initiate an episode of care.

Abstract

Importance

Given that suicide rates have been increasing over the past decade and the demand for mental health care is at an all-time high, targeted prevention efforts are needed to identify individuals seeking to initiate mental health outpatient services who are at high risk for suicide. Suicide prediction models have been developed using outpatient mental health encounters, but their performance among intake appointments has not been directly examined.

Objective

To assess the performance of a predictive model of suicide attempts among individuals seeking to initiate an episode of outpatient mental health care.

Design, Setting, and Participants

This prognostic study tested the performance of a previously developed machine learning model designed to predict suicide attempts within 90 days of any mental health outpatient visit. All mental health intake appointments scheduled between January 1,

2012, and April 1, 2022, at Kaiser Permanente Northern California, a large integrated health care delivery system serving over 4.5 million patients, were included. Data were extracted and analyzed from August 9, 2022, to July 31, 2023.

Main Outcome and Measures

Suicide attempts (including completed suicides) within 90 days of the appointment, determined by diagnostic codes and government databases. All predictors were extracted from electronic health records.

Results

The study included 1 623 232 scheduled appointments from 835 616 unique patients. There were 2800 scheduled appointments (0.17%) followed by a suicide attempt within 90 days. The mean (SD) age across appointments was 39.7 (15.8) years, and most appointments were for women (1 103 184 [68.0%]). The model had an area under the receiver operating characteristic curve of 0.77 (95% CI, 0.76-0.78), an area under the precision-recall curve of 0.02 (95% CI, 0.02-0.02), an expected calibration error of 0.0012 (95% CI, 0.0011-0.0013), and sensitivities of 37.2% (95% CI, 35.5%-38.9%) and 18.8% (95% CI, 17.3%-20.2%) at specificities of 95% and 99%, respectively. The 10% of appointments at the highest risk level accounted for 48.8% (95% CI, 47.0%-50.6%) of the appointments followed by a suicide attempt.

Conclusions and Relevance

In this prognostic study involving mental health intakes, a previously developed machine learning model of suicide attempts showed good overall classification performance. Implementation research is needed to determine appropriate thresholds and interventions for applying the model in an intake setting to target high-risk cases in a manner that is acceptable to patients and clinicians.

<https://doi.org/10.1037/cfp0000252>

The impact of the military lifestyle on adult military children relationships.

Freeman, B., Georgia Salivar, E., & Thayer, K. K.

Couple and Family Psychology: Research and Practice
(2024); 13(1), 1–14

Military families face numerous stressors that civilian families do not typically experience, including frequent relocations, multiple school transitions, parental deployment, and foreign country residence. These unique stressors often disrupt military children's (MC) familial and social relationships, which may carry into their relationships in adulthood. The present study aimed to better understand the potential impact of military stressors on MC's relationships in adulthood. Emotional expression, attachment style (AS), relationship quality, and relationship status of MC (n = 291) were compared to adult children of civilian parents (n = 293). The results revealed that adult MC displayed significantly higher rates of insecure AS and alexithymia compared to adults raised by civilian parents. Parental deployment during certain developmental groups (i.e., 6–8, 9–11, 15–18 years) was associated with increased alexithymia. Adult MC did not differ in couple satisfaction, relationship commitment, intimate partner violence, and overall intimacy. The present study provides evidence that adult MC may differ from adult children of civilian parents in alexithymia and attachment. Mental health professionals are encouraged to utilize prevention strategies when working with military families to prevent negative outcomes. Limitations, research implications, and clinical implications are discussed. (PsycInfo Database Record (c) 2024 APA, all rights reserved)

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Daily exposure to combat-related cues and posttraumatic stress symptoms among veterans: Moderating effects of peri- and postdeployment experiences.

Mahsa Mojallal, Raluca M. Simons, Jeffrey S. Simons, Surabhi Swaminath

Journal of Traumatic Stress
(2024); 37, 57–68

One of the central symptoms of posttraumatic stress disorder (PTSD) is a heightened reactivity to trauma cues. The current study used experience sampling to investigate the associations between exposure to combat-related cues and PTSD symptoms in 93 U.S. veterans who served in support of recent military operations in Afghanistan and Iraq. We also examined the effects of peri- and postdeployment factors, including exposure to combat, unit support during deployment, and postdeployment social support on PTSD. Participants completed eight brief random surveys daily for 2 weeks using palmtop computers. The results indicated that more daytime exposure to trauma cues was associated with experiencing more PTSD symptoms at the within-person level, $B =$

3.18. At the between-person level, combat exposure, $B = 4.20$, was associated with more PTSD symptoms, whereas unit support, $B = -0.89$, was associated with experiencing fewer symptoms. At the cross-level interaction, unit support, $B = -0.80$, moderated the association between trauma cue exposure and PTSD symptom count. Contrary to our hypothesis, postdeployment social support, $B = -0.59$, was not associated with PTSD symptoms. These findings suggest a functional association between exposure to trauma cues and PTSD symptoms among recent-era U.S. veterans and underscore the importance of unit support during deployment.

<https://doi.org/10.1177/0095327X241236221>

A Playstation Mentality to Killing? Adverse Psychological Consequences in Drone Pilots and the Stigmatization thereof in the Military.

Molenkamp, A., Weerdesteijn, M., & Smeulers, A.

Armed Forces & Society

First published online March 27, 2024

Since the start of the 21st century, drones are increasingly used for military purposes. There have been concerns that the work of drone pilots resembles a video game and it has been argued that drone pilots are less likely to develop mental health problems than other service members. Such an assumption could increase stigmatization but empirical research is lacking. For this explorative study, 11 respondents were interviewed. They were purposefully sampled from the United States, the Netherlands, and Israel because of their insight into the working environment of drone pilots. These respondents included scholars, a therapist, and military personnel. They suggested that drone pilots do face mental health problems because of their work and that due to their distance to the battlefield, stigmatization of these problems is more likely. These findings, however, are nuanced by differences across countries and units.

<https://doi.org/10.1001/jamahealthforum.2024.0131>

Racial and Ethnic Differences in Telemedicine Use.

Marcondes, F. O., Normand, S. T., Le Cook, B., Huskamp, H. A., Rodriguez, J. A., Barnett, M. L., Uscher-Pines, L., Busch, A. B., & Mehrotra, A.

JAMA Health Forum
March 22, 2024

Key Points

Question

Does telemedicine use differ by race and ethnicity?

Finding

In this cross-sectional study of individuals enrolled in traditional Medicare from March 2020 to February 2022, Black and Hispanic individuals with Medicare fee-for-service insurance had higher unadjusted rates of telemedicine use compared with White individuals. After controlling for geography and demographic and clinical factors, Black and Hispanic individuals were less likely to receive telemedicine than White individuals.

Meaning

The results of this study suggest that although during the COVID-19 pandemic Black and Hispanic individuals received more telemedicine visits per capita, after controlling for geographic region and other factors, Black and Hispanic individuals received less telemedicine.

Abstract

Importance

Individuals of racial and ethnic minority groups may be less likely to use telemedicine in part due to lack of access to technology (ie, digital divide). To date, some studies have found less telemedicine use by individuals of racial and ethnic minority groups compared with White individuals, and others have found the opposite. What explains these different findings is unclear.

Objective

To quantify racial and ethnic differences in the receipt of telemedicine and total visits with and without accounting for demographic and clinical characteristics and geography.

Design, Setting, and Participants

This cross-sectional study included individuals who were continuously enrolled in traditional Medicare from March 2020 to February 2022 or until death.

Exposure

Race and ethnicity, which was categorized as Black non-Hispanic, Hispanic, White non-Hispanic, other (defined as American Indian/Pacific Islander, Alaska Native, and Asian), and unknown/missing.

Main Outcomes and Measures

Total telemedicine visits (audio-video or audio); total visits (telemedicine or in-person) per individual during the study period. Multivariable models were used that sequentially adjusted for demographic and clinical characteristics and geographic area to examine their association with differences in telemedicine and total visit utilization by documented race and ethnicity.

Results

In this national sample of 14 305 819 individuals, 7.4% reported that they were Black, 5.6% Hispanic, and 4.2% other race. In unadjusted results, compared with White individuals, Black individuals, Hispanic individuals, and individuals of other racial groups had 16.7 (95% CI, 16.1-17.3), 32.9 (95% CI, 32.3-33.6), and 20.9 (95% CI, 20.2-21.7) more telemedicine visits per 100 beneficiaries, respectively. After adjustment for clinical and demographic characteristics and geography, compared with White individuals, Black individuals, Hispanic individuals, and individuals of other racial groups had 7.9 (95% CI, -8.5 to -7.3), 13.2 (95% CI, -13.9 to -12.6), and 9.2 (95% CI, -10.0 to -8.5) fewer telemedicine visits per 100 beneficiaries, respectively. In unadjusted and fully adjusted models, and in 2019 and the second year of the COVID-19 pandemic, Black individuals, Hispanic individuals, and individuals of other racial groups continued to have fewer total visits than White individuals.

Conclusions and Relevance

The results of this cross-sectional study of US Medicare enrollees suggest that although nationally, Black individuals, Hispanic individuals, and individuals of other racial groups received more telemedicine visits during the pandemic and disproportionately lived in geographic regions with higher telemedicine use, after controlling for geographic region, Black individuals, Hispanic individuals, and individuals of other racial groups received fewer telemedicine visits than White individuals.

<https://doi.org/10.1007/s41347-023-00350-1>

Competencies in Telepsychology: A Developmental Framework for Psychology Training and Professional Preparation.

William S. Frye, Marissa Feldman, Jon Campbell & Lauren Gardner

Journal of Technology in Behavioral Science
Volume 9, pages 20–25, (2024)

While telepsychology has been present for over a decade, the COVID-19 pandemic led to increased utilization of telepsychology without formal training for psychologists or advanced-level trainees. The American Psychological Association (APA) has provided guidelines for telepsychology use, but there is no formal training model or competency framework specifically for telepsychology. The authors suggest three possibilities for standardizing competencies in a developmental framework. These include integrating telepsychology into the current profession-wide competencies (PWCs), creating separate PWCs for in-person and telepsychology to assess trainee skill development specific to the mode of service delivery, or adding a new tenth PWC for telepsychology. An expert panel or task force may be best equipped to develop training standards for telepsychology to guide curricula for training and assessment of telepsychology competency for both trainees and licensed psychologists.

<https://doi.org/10.1002/jts.23012>

State of the science: Eye movement desensitization and reprocessing (EMDR) therapy.

Ad de Jongh, Carlijn de Roos, Sharif El-Leithy

Journal of Traumatic Stress
First published: 28 January 2024

Eye movement desensitization and reprocessing (EMDR) therapy is an evidence-based psychotherapy for posttraumatic stress disorder (PTSD), with support from more than 30 published randomized controlled trials (RCTs) demonstrating its effectiveness in both adults and children. Most international clinical practice guidelines recommend EMDR therapy as a first-line treatment for PTSD. This paper describes the current state of the evidence for EMDR therapy. We begin with a brief description of EMDR therapy and its theoretical framework. Next, we summarize the scientific support for its efficacy, effectiveness, and safety and discuss its applicability across cultures and with diverse

populations. We conclude with suggestions for future directions to develop the research base and applications of EMDR therapy.

<https://doi.org/10.1002/jts.23000>

Longitudinal associations among experiences of sexual assault, posttraumatic stress disorder symptoms, and heavy drinking in young adults.

Eric R. Pedersen, Jordan P. Davis, Liv Canning, Joan S. Tucker, John Prindle, Rachana Seelam, Michael S. Dunbar, Daniel Siconolfi, Elizabeth J. D'Amico

Journal of Traumatic Stress

First published: 18 December 2023

Prior research with young adults has demonstrated clear associations between experiences of sexual assault, symptoms of posttraumatic stress disorder (PTSD), and alcohol use, but most studies have been cross-sectional or have not considered multiple theoretical pathways to understand these associations. Using six waves of data from a longitudinal cohort sample of 1,719 young adults, we examined associations among experiences of past-year sexual assault (i.e., rape, unwanted sexual touching, and physical intimidation in a sexual way), PTSD symptoms, and the frequency of binge drinking over time, allowing for the exploration of symptom-induced, interpersonal risk, and substance-induced pathways for male and female participants. For both male, β s = 2.84 to 6.55, and female participants, β s = 2.96 to 10.1, higher prior levels of PTSD symptoms were associated with larger increases in binge drinking over time. For female participants, higher prior levels of sexual assault were associated with larger increases in PTSD symptoms over time, β s = 3.48 to 4.25, whereas for male participants, higher prior levels of past-year binge drinking were associated with decreases in PTSD symptoms over time, β s = -2.75 to -0.53. Continued efforts are needed to prevent sexual assault among young adults and address PTSD symptoms among those who experience sexual assault. Interventions that target binge drinking are also needed for individuals who experience PTSD symptoms, especially young adults, to address potentially hazardous drinking before problems escalate and become chronic.

<https://doi.org/10.1002/jts.23015>

Gender differences in mental health outcomes among Afghanistan veterans exposed to war zone trauma.

Line Rønning, Andreas Espetvedt Nordstrand, Odin Hjemdal, Hans Jakob Bøe

Journal of Traumatic Stress

First published: 25 January 2024

Research has sought to identify whether women have an increased risk of developing mental health problems following military trauma compared to men, but the results are mixed. This study examined gender differences in a range of mental health outcomes within three levels of war zone trauma exposure and investigated gender differences in risk and protective factors associated with clinical mental health problems. Using data from a cross-sectional, postdeployment survey, a sample of Norwegian veterans of recent military operations in Afghanistan (N = 6,205, 8.3% women) were sorted according to reported war zone trauma exposure level (low, medium, high), then assessed for symptoms of posttraumatic stress disorder (PTSD), posttraumatic distress, anxiety, depression, insomnia, and alcohol problems. The findings revealed that men who reported low war zone exposure had lower levels of posttraumatic distress symptoms than women, $d = -0.20$, $p = .040$, but were more likely to report symptoms of alcohol problems within the low, $d = 0.33$, $p < .001$; medium, $d = 0.39$, $p < .001$; and high, $d = 0.37$, $p = .049$, exposure groups; however, these differences disappeared when all symptom variables were combined into one clinical mental health problem variable. Women with a clinical mental health problem were less likely to report war zone exposure than men, OR = 0.93, 95% CI [0.90, 0.97], $p = .001$. Findings suggest that although gender differences in mental health symptoms exist, male and female veterans with mental health problems may share more similarities than previously recognized.

<https://doi.org/10.1002/jts.22999>

The impact of screening positive for hazardous alcohol use on the diagnostic accuracy of the PTSD Checklist for DSM-5 among veterans.

Rebecca E. Sistas, Rachel Kimerling, Paula P. Schnurr, Michelle J. Bovin

The Posttraumatic Stress Disorder (PTSD) Checklist for DSM-5 (PCL-5) is a widely used self-report measure of PTSD symptoms that has demonstrated strong psychometric properties across settings and samples. Co-occurring hazardous alcohol use and PTSD are prevalent among veterans, and the effects of alcohol use may impact the performance of the PCL-5. However, this possibility is untested. In this study, we evaluated the PCL-5 diagnostic accuracy for veterans who did and did not screen positive for hazardous alcohol use according to the Alcohol Use Disorders Identification Test–Consumption (AUDIT-C). Participants were 385 veterans recruited from Veterans Affairs primary care clinics. Results indicated that PCL-5 performance, AUC = .904, 95% CI [.870, .937], did not differ as a product of hazardous alcohol use. PCL-5 diagnostic utility was comparably high for veterans with, AUC = .904; 95% CI [.846, .962], and without, AUC = .904 95% CI [.861, .946], positive AUDIT-C screens. Although optimally efficient cutoff scores for veterans who screened positive were higher (i.e., 34–36) than for those with negative screens (i.e., 30), neither were significantly different from the overall PCL-5 cutoff score (i.e., 32), suggesting that neither veterans with nor without positive AUDIT-C screens require differential PCL-5 cutoff scores. The results do underscore the importance of using PCL-5 cutoff scores in concert with clinical judgment when establishing a provisional PTSD diagnosis and highlight the need for additional study of the impact of comorbidities on PCL-5 diagnostic accuracy and cutoff scores.

<https://doi.org/10.1093/qjmed/hcad240>

The uncounted casualties of war: suicide in combat veterans.

Sher L.

QJM: An International Journal of Medicine

Volume 117, Issue 3, March 2024, Pages 163–167

Military conflicts are ubiquitous. There are a lot of combat veterans around the world. Suicidality in combat veterans is a large and important issue. In this article, the author discusses some aspects of this issue. The combat environment is characterized by violence, physical strains, separation from loved ones and other hardships. Combat deployment may lead to multiple emotional, cognitive, psychosomatic symptoms,

suicidal ideation and behavior. Pre-deployment, deployment and post-deployment adversities may increase suicide risk in combat veterans. The act of killing in combat is a stressor which may raise suicide risk. Combat-related injuries are associated with increased suicide risk. Post-deployment difficulties of reintegrating into civilian life may lead to depression and suicidality. Studies suggest that suicidal behavior in combat veterans may have a neurobiological basis. Prevention of suicide among combat veterans should include pre-deployment screening to exclude individuals with psychiatric disorders; psychological support and prevention of harassment and/or abuse during deployment; psychosocial support after deployment; diagnosing and treating psychiatric and medical disorders including neurological disorders; frequent suicide screening; education of mental and non-mental health clinicians, war veterans, their families and friends regarding signs/symptoms of suicidality; and restriction of access to lethal means. We need to study the specific psychobiology of combat veterans to understand how to develop effective suicide prevention interventions for this population.

<https://doi.org/10.1371/journal.pone.0301026>

Study protocol: Identifying transcriptional regulatory alterations of chronic effects of blast and disturbed sleep in United States Veterans.

Sullan, M. J., Stearns-Yoder, K. A., Wang, Z., Hoisington, A. J., Bramoweth, A. D., Carr, W., Ge, Y., Galfalvy, H., Haghghi, F., & Brenner, L. A.

PLoS ONE

19(3): e0301026

Published: March 27, 2024

Injury related to blast exposure dramatically rose during post-911 era military conflicts in Iraq and Afghanistan. Mild traumatic brain injury (mTBI) is among the most common injuries following blast, an exposure that may not result in a definitive physiologic marker (e.g., loss of consciousness). Recent research suggests that exposure to low level blasts and, more specifically repetitive blast exposure (RBE), which may be subconcussive in nature, may also impact long term physiologic and psychological outcomes, though findings have been mixed. For military personnel, blast-related injuries often occur in chaotic settings (e.g., combat), which create challenges in the immediate assessment of related-injuries, as well as acute and post-acute sequelae. As such, alternate means of identifying blast-related injuries are needed. Results from previous work suggest that epigenetic markers, such as DNA methylation, may provide

a potential stable biomarker of cumulative blast exposure that can persist over time. However, more research regarding blast exposure and associations with short- and long-term sequelae is needed. Here we present the protocol for an observational study that will be completed in two phases: Phase 1 will address blast exposure among Active Duty Personnel and Phase 2 will focus on long term sequelae and biological signatures among Veterans who served in the recent conflicts and were exposed to repeated blast events as part of their military occupation. Phase 2 will be the focus of this paper. We hypothesize that Veterans will exhibit similar differentially methylated regions (DMRs) associated with changes in sleep and other psychological and physical metrics, as observed with Active Duty Personnel. Additional analyses will be conducted to compare DMRs between Phase 1 and 2 cohorts, as well as self-reported psychological and physical symptoms. This comparison between Service Members and Veterans will allow for exploration regarding the natural history of blast exposure in a quasi-longitudinal manner. Findings from this study are expected to provide additional evidence for repetitive blast-related physiologic changes associated with long-term neurobehavioral symptoms. It is expected that findings will provide foundational data for the development of effective interventions following RBE that could lead to improved long-term physical and psychological health.

<https://doi.org/10.1097/NMD.0000000000001768>

The Nature of Combat Stress Development During Military Operations and Psychotherapy in Extreme Situations.

Ovsyannikova, Y., Pokhilko, D., Krasnokutskyi, M., Kerdyvar, V., & Kreshchuk, K.

The Journal of Nervous and Mental Disease
March 13, 2024

The purpose of the research work is the theoretical and empirical analysis of the study of the nature of combat stress in military personnel and the assessment of psychotherapeutic methods of providing psychological assistance in extreme situations. The authors used the following methods to achieve this goal: method of analysis and synthesis, hermeneutic method, testing method, comparative method, and generalization method. The results of the research work have revealed the meaning of traumatic stress, psychological trauma, and combat mental trauma, and explained the concept of combat stress and the dynamics of its growth. The findings identified the factors of posttraumatic stress syndrome and its prevalence, tracked down the

dynamics of psychoemotional disorders, and revealed the importance of military psychological selection and determination of combat readiness. The authors established the main tasks of a staff psychologist in working with military personnel, conducted an empirical study of the nature of combat stress in the military, observed main psychotherapeutic tools for the prevention of negative mental states in combat conditions, and investigated self-regulation techniques of emotional, physical, and mental health. The practical significance of the scientific work lies in the modern coverage of the phenomenon of combat stress and the classification of effective psychotherapeutic methods that will ensure the sustainable psychological preparation of the soldiers for extreme situations.

<https://doi.org/10.1016/j.jpsychires.2024.02.033>

Reduced pre-attentive threat versus nonthreat signal discrimination in clinically healthy military personnel with recurrent combat exposure history: A preliminary event-related potential (ERP) study.

Lawrence, A. J., Lawrence-Wood, E., Aidman, E. V., Spencer-Merris, P. L., Felmingham, K. L., & McFarlane, A. C.

Journal of Psychiatric Research
Volume 172, April 2024, Pages 266-273

Evidence now suggests that traumatic-stress impacts brain functions even in the absence of acute-onset post-traumatic stress disorder (PTSD) symptoms. These neurophysiological changes have also been suggested to account for increased risks of PTSD symptoms later developing in the aftermath of subsequent trauma. However, surprisingly few studies have explicitly examined brain function dynamics in high-risk populations, such as combat exposed military personnel without diagnosable PTSD. To extend available research, facial expression sensitive N170 event-related potential (ERP) amplitudes were examined in a clinically healthy sample of active service military personnel with recurrent combat exposure history. Consistent with several established theories of delayed-onset PTSD vulnerability, higher N170 amplitudes to backward-masked fearful and neutral facial expressions correlated with higher levels of past combat exposure. Significantly elevated amplitudes to nonthreatening neutral facial expressions also resulted in an absence of normal threat-versus-nonthreat signal processing specificity. While a modest sample size and cross-sectional design are key limitations here, ongoing prospective-longitudinal follow-ups may shed further light on

the precise aetiology and prognostic utility of these preliminary findings in the near future.

<https://doi.org/10.1111/famp.12874>

Positive and negative family communication and mental distress: Married service members during a non-combat deployment.

Sullivan, K., Park, Y., Kale, C. N., Adler, A., Sipos, M. L., & Riviere, L. A.

Family Process

First published: 13 April 2023

This study examines whether married service member perceptions of positive or negative communication moderate the relationship between how frequently they communicate home during a deployment and their mental distress. Participants included 382 married service members who completed surveys regarding their marital relationships, communication, and mental health while on a non-combat deployment. Though marital satisfaction was not significantly associated with service member reports of their mental distress, perceptions of negative ($\beta = 4.32$, $SE = 0.59$, $p < 0.001$) and positive communication ($\beta = -1.32$, $SE = 0.57$, $p < 0.05$) were. Further, significant interactions between frequency of communication and the perception of negative ($\beta = 0.54$, $SE = 0.13$, $p < 0.001$) and positive ($\beta = 0.17$, $SE = 0.07$, $p < 0.01$) communication suggest positive communication may be protective for service members while frequent, negative communication can exacerbate distress. Findings highlight the importance of engaging families in planning and skill building to support healthy communication across the deployment cycle.

<https://doi.org/10.1002/jts.23032>

Dispositional mindfulness moderates the links between potentially morally injurious event exposure and symptoms of anxiety and depression but not suicidal ideation.

Elizabeth L. Wetzler, Ryan G. Erbe, James F. M. Cornwell, Michael D. Wood

Journal of Traumatic Stress
First published: 28 March 2024

Exposure to potentially morally injurious events (PMIEs) is a pervasive threat for military service members and may be associated with symptoms of anxiety, depression, and suicidal ideation. However, coping mechanisms, such as mindfulness, may ameliorate symptoms and improve recovery. Two studies were conducted to test dispositional mindfulness as a moderator of the links between PMIEs, as assessed using the Moral Injury Events Scale (i.e., total score and Self-Transgression, Other-Transgression, and Betrayal subscale scores), and symptoms of anxiety, depression, and suicidal ideation among different samples of active-duty soldiers in garrison. In Sample 1 (N = 310), mindfulness buffered the links between PMIE exposure and symptoms of both anxiety, $\Delta R^2 = .02$, and depression, $\Delta R^2 = .03$. In Sample 2 (N = 669), mindfulness moderated the link between the MIES Betrayal subscale and anxiety symptoms, $\Delta R^2 = .01$. The results suggest that dispositional mindfulness may be a protective factor against some of the negative impacts of PMIE exposure. Further implications are discussed.

<https://doi.org/10.1002/jts.23033>

From posttraumatic stress symptoms to suicidal ideation among military veterans: Pathways founded on meaning in life and gratitude.

Shaina A. Kumar, Emily Taverna, Shelby Borowski, Brian N. Smith, Dawne Vogt

Journal of Traumatic Stress
First published: 25 March 2024

Military veterans experience higher rates of suicidal ideation compared to nonveteran populations. Importantly, suicidal ideation often precedes and predicts fatal and nonfatal suicide attempts, and thus it is critical to better understand factors that increase risk for suicidal ideation to inform suicide prevention efforts in this population. One key predictor of suicidal ideation is exposure to traumatic experiences and their sequelae, particularly posttraumatic stress symptoms (PTSS). However, little work has explored how deficits in well-being contribute to this association among veterans. We tested two aspects of well-being—meaning in life and gratitude—as potential mechanisms underlying the pathway from PTSS to suicidal ideation among 7,388 men and women veterans who recently separated from service. A parallel mediation analysis revealed significant paths from more severe PTSS to more frequent suicidal ideation through diminished meaning

in life, $B = 0.005$, $SE = 0.001$, 95% CI [0.004, 0.007], and gratitude, $B = 0.001$, $SE = 0.001$, 95% CI [< 0.001 , 0.002]. Gender differences were also observed. Although the results related to meaning in life appeared to replicate across gender, pathways involving gratitude differed among men and women. Overall, our findings suggest that helping veterans build meaning and appreciation in everyday life may be a proactive and holistic approach to suicide prevention.

<https://doi.org/10.3138/jmvfh-2023-0024>

Being a woman in a man's military: The impact of military service on the lives of older U.S. women Veterans.

Amanda Carrol, Twylla Kirchen

Journal of Military, Veteran and Family Health

First published: 29 January 2024

This qualitative study explored the experiences of older U.S. women Veterans regarding their experiences and perceptions of their time in military service and its overall impact on their lives. Five women Veterans participated in interviews that were analyzed and resulted in four main themes: 1) family military history, 2) being treated differently and proving themselves, 3) making the most of opportunities, and 4) lasting personal strengths. Findings from this study highlight how, despite enduring negative experiences during military service because of gender, participants credited the military with having an overall positive impact on their lives in the long term. This study suggests that health care interventions and services that tap into positive aspects of military service, as identified by older women Veterans (i.e., personal strengths such as resilience and pride), may have the potential to promote the health and well-being of this population.

<https://doi.org/10.1007/s10880-023-09992-y>

Cognitive Behavioral Therapy for Insomnia Self-Management Mobile Apps: A Review of Efficacy and Quality.

Anderson B. Rowan, Anna T. Magnante, Nicole Urh & Lynette Figueroa

Journal of Clinical Psychology in Medical Settings
Published: 28 January 2024

Cognitive behavioral therapy for insomnia (CBT-I) is the recommended treatment for insomnia, yet multiple barriers limit utilization. Digital CBT-I may present a solution, though related reviews have focused on Internet-based delivery rather than app use. The high utilization of health apps and prevalence of sleep apps indicate the need to equip clinicians with app-specific research. Toward this end, we reviewed efficacy and quality data on self-management CBT-I smartphone apps, revealing efficacy research on eleven apps, five of which were publicly available. While preliminary, these efficacy studies showed consistent positive findings. When examining quantitative quality indicators for the five publicly available apps, two had consistent data. Overall, two apps, CBTi Coach and Insomnia Coach, had positive, empirical findings across all efficacy and quality assessment approaches. We provide recommendations to guide clinician decision making regarding CBT-I self-management apps based on the literature and publicly available methods of app evaluations.

<https://doi.org/10.1093/milmed/usae003>

Heart Rate Variability Biofeedback as a Treatment for Military PTSD: A Meta-Analysis.

Jordan Kenemore, BA, Grant Benham, PhD, Ruby Charak, PhD, Juventino Hernandez Rodriguez, PhD

Military Medicine

Published: 25 January 2024

Introduction

Emerging research has provided tentative support for the use of heart rate variability biofeedback (HRVB) as a treatment for several psychological disorders, with meta-analyses providing compelling evidence for HRVB as a promising treatment for anxiety, depression, and PTSD. Given the prevalence of PTSD in military veterans and the comparatively lower benefit and higher attrition rate of traditional psychological treatment for PTSD relative to civilian counterparts, it is important to examine complementary and alternative treatment approaches such as HRVB in this population. Although studies of HRVB for PTSD have been conducted with military veterans, they

have involved relatively small sample sizes, limiting interpretation. To address this, the current article presents a comprehensive meta-analysis, consolidating existing literature to more accurately evaluate the efficacy of HRVB in reducing PTSD symptoms within military populations.

Materials and Methods

This meta-analysis was conducted according to Preferred Reporting Items for Systematic Reviews and Meta-Analysis guidelines, and our protocol was registered with PROSPERO to increase review transparency. A literature search of HRVB interventions was conducted using PubMed, PsycINFO, Military Database, PTSDPubs, and EBSCO's Psychological and Behavioral Sciences Collection.

Results

Five studies met eligibility criteria, providing a combined sample size of 95 military services members. For all studies, effect sizes were negative, indicating a reduction in PTSD symptoms. Effect sizes ranged from -1.614 to -0.414 , resulting in an overall moderate to large mean effect for HRVB (Hedges's $g = -0.557$; 95% confidence interval = -0.818 to -0.296 ; $P < .001$). Additionally, cumulative attrition was 5.8%, significantly lower than commonly reported rates for evidence-based treatments (16%–36%).

Conclusions

The present study is the first meta-analysis to examine HRVB as a treatment for military service members with PTSD. Results indicate that HRVB may be a viable treatment approach to reduce PTSD symptomatology. Low attrition rates, ease of accessibility, and favorable participant outlook serve as additional benefits for the use of HRVB.

<https://doi.org/10.1016/j.jpsychires.2024.02.013>

Generalized anxiety and mild anxiety symptoms in U.S. military veterans: Prevalence, characteristics, and functioning.

G Macdonald-Gagnon, EA Stefanovics, MN Potenza, RH Pietrzak

Journal of Psychiatric Research
Volume 171, March 2024, Pages 263-270

Generalized anxiety disorder (GAD) is a mental disorder characterized by excessive anxiety and worries that impair daily functioning. While prior work has documented the prevalence and correlates of GAD and subthreshold GAD (SGAD) in clinical samples, contemporary data on the epidemiology of anxiety symptoms are lacking, particularly in higher-risk populations such as military veterans. To address this gap, we analyzed data from a large, nationally representative sample of U.S. veterans to examine the: prevalence of probable GAD and mild anxiety symptoms measured using a brief screener; sociodemographic and military characteristics associated with anxiety symptoms; and psychiatric and functional correlates of anxiety symptoms. Results revealed that a total of 7.9% (95% confidence interval [CI] = 6.7–9.3%) and 22.1% (95%CI = 20.5–23.9%) of veterans screened positive for probable GAD and mild anxiety symptoms, respectively. Relative to veterans without anxiety symptoms, those with probable GAD and mild anxiety symptoms were younger, more likely to be female and racial/ethnic minorities, and more likely to have served 2+ deployments. Further, a “dose-response” association was observed between anxiety symptom severity and clinical correlates, with robust associations observed between probable GAD and poorer mental health, suicidal thoughts and behaviors, and functional impairment. Mild anxiety symptoms showed intermediate magnitude associations with these outcomes. Results of this study suggest that 3-of-10 U.S. veterans report anxiety symptoms. While the use of a brief screener to assess mild anxiety symptoms and probable GAD is limited, findings underscore the importance of a dimensional approach to assessing anxiety symptoms and associated clinical and functional characteristics in veterans.

<https://doi.org/10.5664/jcsm.11026>

Toward personalized care for insomnia in the US Army: a machine learning model to predict response to cognitive behavioral therapy for insomnia.

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Journal of Clinical Sleep Medicine
Published Online: February 1, 2024

STUDY OBJECTIVES:

The standard of care for military personnel with insomnia is cognitive behavioral therapy

for insomnia (CBT-I). However, only a minority seeking insomnia treatment receive CBT-I, and little reliable guidance exists to identify those most likely to respond. As a step toward personalized care, we present results of a machine learning (ML) model to predict CBT-I response.

METHODS:

Administrative data were examined for n=1,449 nondeployed US Army soldiers treated for insomnia with CBT-I who had moderate-severe baseline Insomnia Severity Index (ISI) scores and completed one or more follow-up ISIs 6-12 weeks after baseline. An ensemble ML model was developed in a 70% training sample to predict clinically significant ISI improvement (reduction of at least two standard deviations on the baseline ISI distribution). Predictors included a wide range of military administrative and baseline clinical variables. Model accuracy was evaluated in the remaining 30% test sample.

RESULTS:

19.8% of patients had clinically significant ISI improvement. Model AU-ROC (SE) was 0.60 (0.03). The 20% of test sample patients with highest probabilities of improvement were twice as likely to have clinically significant improvement as the remaining 80% (36.5% versus 15.7%; $\chi^2=9.2$, $p=.002$). Nearly 85% of prediction accuracy was due to ten variables, the most important of which were baseline insomnia severity and baseline suicidal ideation.

CONCLUSIONS:

Pending replication, the model could be used as part of a patient-centered decision-making process for insomnia treatment. Parallel models will be needed for alternative treatments before such a system is of optimal value.

<https://doi.org/10.1016/j.jpsychires.2024.01.034>

Firearm suicide risk beliefs and prevention: The role of fear of community violence and firearm ownership for protection.

Daniel B. Lee, Megan Simmons, Rebeccah L. Sokol, Haley Crimmins, ... Patrick M. Carter

Journal of Psychiatric Research
Volume 171, March 2024, Pages 340-345

Introduction

Household firearm availability is a risk factor for firearm suicide when a household member at-risk for suicide. Firearm ownership for protection and perceptions of community violence may reduce the likelihood of limiting access to firearms as a way to prevent suicide. The association between a firearm suicide risk belief and the intention to reduce firearm access as a means of preventing suicide, with fear of community violence and firearm ownership for protection as moderators, was examined.

Materials and methods

The analytic sample consisted of 388 Missouri firearm owners from a cross-sectional, statewide survey of Missouri adults. Logistic regression models were estimated.

Results

Among Missouri firearm owners, firearm suicide risk belief was positively associated with the intention of reducing firearm access for firearm owners who were not afraid of community violence and owned a firearm for non-protection reasons (e.g., hunting).

Discussion

Findings suggest that firearm suicide prevention efforts must be tailored to address the underlying beliefs about their violence risk among firearm owners who indicate they principally own for protection.

Links of Interest

Spouse education and career opportunities: What is SECO?

<https://militaryreach.auburn.edu/ffSpouseEducation.jsp>

DOD reproductive care travel policy used just 12 times in 7 months

<https://www.militarytimes.com/news/your-navy/2024/03/26/dod-reproductive-care-travel-policy-used-just-12-times-in-7-months/>

New analysis of Air Force suicides explores contributing factors

<https://www.airforcetimes.com/news/your-air-force/2024/03/27/new-analysis-of-air-force-suicides-explores-contributing-factors/>

- [Total Force DAF Standardized Suicide Fatality Analysis: Calendar Year 2020 Leadership Report](#)

Army creates central office to manage moves of service families with special needs
<https://www.stripes.com/branches/army/2024-03-28/army-special-needs-military-moves-13447470.html>

Two Black cadets and the struggle for diversity at an elite US military institution
<https://www.reuters.com/investigates/special-report/usa-race-academy/>

Military sexual trauma cases have been removed from the chain of command — but there's more work to do
<https://taskandpurpose.com/opinion/military-sexual-trauma-chain-of-command/>

Staff Perspective: Helping Patients Off Hypnotic Medications Using CBT-I
<https://deploymentpsych.org/blog/staff-perspective-helping-patients-hypnotic-medications-using-cbt-i>

Staff Perspective: Accessing Care for Military-Connected Children - Views from Parents
<https://deploymentpsych.org/blog/staff-perspective-accessing-care-military-connected-children-views-parents>

Resource of the Week: [2023 Military Family Lifestyle Survey](#)

From Blue Star Families:

Blue Star Families' annual Military Family Lifestyle Survey (MFLS) has been the preeminent way to understand the experiences and challenges faced by military families since its inception in 2009. Gathering over 100,000 cumulative responses, the MFLS provides valuable insights into a wide range of issues affecting military families, including access to health care, food insecurity, employment, and housing.

Blue Star Families conducted the 2023 Military Family Lifestyle Survey from May to July 2023. Capturing the experiences of more than 7,400 respondents worldwide and generating millions of data points, the MFLS remains the largest and most comprehensive survey of active-duty, National Guard, and Reserve service members, Veterans, and their families.

7,431 respondents

Including active-duty, National Guard and Reserve service members, Veterans, and their family members.

Over 100,000 cumulative responses to date!

Blue Star Families' annual Military Family Lifestyle Survey has been providing a comprehensive understanding of what it means to serve as a military family since 2009.

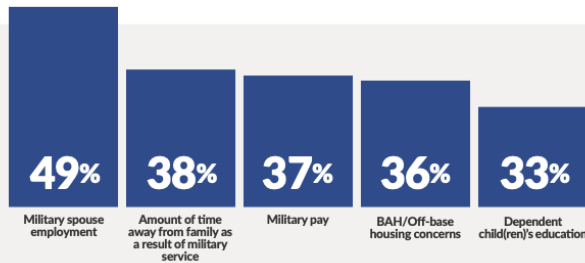


Blue Star Families

Military Family Lifestyle Survey

Top Issues

for active-duty family respondents



55%

2016



of active-duty family respondents were likely to recommend military service.¹

32%

2023



of active-duty family respondents were likely to recommend military service.¹

Military Families are Key to

Recruitment & Retention

Likelihood to recommend military service is dropping

38%

of active-duty family respondents had encouraged an acquaintance to join the military in the past five years.

46%

Almost half of those who encouraged someone who joined reported that the person was not previously connected to the military.

Quality-of-Life Issues

Impact Likelihood to Recommend Military Service



Belonging

Active-duty family respondents who feel a sense of belonging to their local civilian community:

- report greater well-being²
- are more likely to recommend military service⁴



Spouse Employment

A greater proportion of employed active-duty spouses recommend military service than their unemployed peers.³



Housing Costs

As out-of-pocket housing costs increase, the likelihood of active-duty family respondents to recommend military service dips.⁵

¹ Provided a response of 7-10 on a scale of 0-10.

² Question wording differed. In 2016, the question was worded "12. How likely are you to recommend a young person close to you to join the military?" In 2023, the question was worded "How likely are you to recommend that a young family member (child, niece, nephew, etc.) join the military? On a scale of 0 to 10 where 0 = "very unlikely" and 10 = "very likely?"

³ Active-duty family respondents who agree that they feel a sense of belonging to their local civilian community compared to those who disagree (48 versus 39, on a scale of 0-70).

⁴ Active-duty family respondents who agree that they feel a sense of belonging to their local civilian community compared to those who disagree (4.36 versus 5.34, on a scale of 0-10).

⁵ Active-duty spouse respondents employed full or part time compared to unemployed (4.8 versus 4.2 on a scale of 0-10).

⁶ Active-duty family respondents with all housing costs covered compared to paying \$200 or more out of pocket (5.03 versus 4.75, on a scale of 0-10).

Funding for the 2023 Military Family Lifestyle Survey is provided through the generosity of our sponsors, The USAA Foundation, Lockheed Martin, Macy's Inc., Northrop Grumman, and CSX. With the additional support of Blue Star Families from Craig Newmark Philanthropies and the Patrick McGovern Foundation.



- [The 2024 Military Family Lifestyle Survey is Open Now!](#)

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Henry M. Jackson Foundation for the Advancement of Military Medicine